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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,239	02/13/2001	Toshimitsu Konuma	SEL 239	9357

7590 11/08/2002

COOK, ALEX, McFARRON, MANZO,
CUMMINGS & MEHLER, LTD.
SUITE 2850
200 WEST ADAMS STREET
CHICAGO, IL 60606

EXAMINER

WILLE, DOUGLAS A

ART UNIT PAPER NUMBER

2814

DATE MAILED: 11/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/782,239	Applicant(s) KONUMA ET AL.	
	Examiner Douglas A Wille	Art Unit 2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 11-84 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7, 35-42, 53-57, 65-68, 70-73, 75-78 and 80-83 is/are allowed.
- 6) ☒ Claim(s) 11-34, 43-52, 58-64, 69, 74, 79 and 84 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>10</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 15 – 28, 30, 31, 33, 34, 44 – 52, 58 – 62, 69, 74, 79 and 84 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 15 – 28, 44, 45, 51, 52, 69, 74, 79 and 84 are directed to a device with the pixel electrode connected to the switching transistor but the device described in the specification shows a switching transistor connected to a current supply transistor which is, in turn, connected to the pixel electrode. Connection of the pixel electrode to the switching transistor leaves the current supply transistor without a connection and is not supported by the specification and it is not known how such a device could be made to function and is not enabled.
3. Claims 46 – 50, which depend on claims 1 – 5 are for a passive device but claims 1 – 5 are for an active device with transistors to drive the pixels and these devices cannot be construed as passive devices. Thus it would not be possible to form a passive device out of the active devices and is not enabled.
4. Claims 58 – 62, which depend on claims 1 – 5 and describe a TFT formed in the silicon substrate. However, claims 1 – 5 describe a device with TFTs which by definition are transistors formed in a thin film. If the transistors are formed in the silicon substrate they are not thin film

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devices but are bulk devices. It is thus not understood how such a device could be conceived and is not enabled.

Claims Allowed

5. Claims 1 – 7, 35 – 42, 53 – 57, 65 – 68, 70 – 73, 75 – 78 and 80 – 83 are allowed.
6. The claimed device is a light emitting device with TFTs and has a pixel electrode with a hole that is filled with an insulator. Hamada shows a device that is the same as the claimed device and has a pixel electrode with a hole, however, in the Hamada device the pixel hole is filled with a hole transporting layer that cannot be considered as an insulator.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 11 – 14, 29, 32, 43 and 64 are rejected under 35 U.S.C. 102(e) as being anticipated by Hamada.

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9. With respect to claims 11 and 13, Hamada shows a passive electroluminescent display (see Figure 4 and column 5, line 20 et seq.) with at least two first electrodes, 103, an insulating layer 2 in the gap between the electrodes 103 a light emitting layer 104 – 107 formed over the first electrodes and the insulating layer and a second electrode 108 opposed to the first electrodes with the light emitting layer between.
10. With respect to claim 12, the first electrode 103 is an anode (column 5, line 34) and the second electrode 108 is a cathode (column 5, line 42).
11. With respect to claim 14, the light emitting layer is organic (column 5, line 32).
12. With respect to claims 29 and 32 the device is a display.
13. With respect to claim 43, the device is a display (column 5, line 20).
14. With respect to claim 64, the designation of cathode and anode is arbitrary and the electrodes could be designated as the reverse of paragraph 10 above.

Claim Rejections - 35 USC § 103

15. Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada in view of Kojima.
16. Hamada shows the insulating regions as partially covering the conductors and uses that to define the width of the emitting region. Kojima show the formation of an electroluminescent element (see cover Figure and column 2, line 50 et seq.) where the electrode 12 and the insulator 17 are flush and this prevents undulations and level differences in the overlying layers (column 3, line 48). It would have been obvious to modify the Hamada teaching to form the insulator and electrode to be at the same level for the advantages shown and to design the spacing so that no overlap is required.

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Response to Arguments

17. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

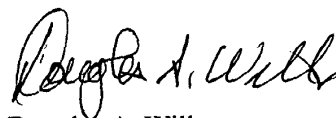
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas A Wille whose telephone number is (703) 308-4949. The examiner can normally be reached on M-F (6:15-3:45).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (703) 308-4918. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink, appearing to read "Douglas A. Wille". The signature is fluid and cursive, with the first name "Douglas" being more prominent.

Douglas A. Wille
Patent Examiner

November 5, 2002